REMARKS

The Specification has been amended on page 3 to add serial numbers to the citations to related applications. The Specification has also been amended at page 4, line 23 and at page 13 line 24, to correct typographical errors.

Claims 1-26 are pending in the application. Claim 24 is amended herein.

Claims 10, 11, 24, and 26 stand rejected under 35 USC § 102(b) as being anticipated by Einkauf et al., U.S. Patent No. 5,283,860 (hereinafter "Einkauf"). The Examiner cites to Einkauf for its purported teachings related to displaying trimmed surfaces for objects on a computer graphics system. Applicant, however, requests that the § 102(b) rejections to claims 10 and 11 be withdrawn because trimming operations of Einkauf fail to teach an element of claim 10, namely, locating boundary vertices of polygons near the trim curve on the trim curve projection.

As defined in the present Application, a "boundary vertex" is a polygonal vertex which lies on one of the boundaries of the object surface. Application at p.7, lines 9-15; p.8, lines 9-10; p.12, lines 4-5. This is in contrast to an "interior vertex," which is a polygonal vertex located on an interior portion of the surface that is within and bounded by surface boundaries. Application at p.7, lines 12-15.

Einkauf fails to teach locating boundary vertices on trim curve projections. See, for example, interior vertices 10 and 11 located on triangle "F" in Figs. 4 and 5 of Einkauf. Triangle F is defined by vertices 12, 13, and 14. An arbitrary trimming curve 7 is shown intersecting triangle F. New vertices 10 and 11 are then "calculated by interpolation methods and original triangle F is then modified by insertion of vertices 10 and 11 at points where trimming curve 7 intersects the original triangle edges." Einkauf, at col.5, lines 12-16. Thus, Einkauf teaches inserting new vertices at the intersection of a trimming curve and the edge of a triangle, without requiring that the new vertices lie on a boundary of the surface of the object being represented. Because the new vertices may lie at points anywhere along the edge of the intersected triangle (Einkauf at col. 10, lines 5-10), Einkauf's method for displaying trimmed surfaces fails to teach locating boundary vertices of polygons on trim curve projections.

In contrast to Einkauf's method, claim 10 of the present Application requires that, for polygons located near a trim curve, boundary vertices must lie on the trim curve projection. This

is an important distinction because, in order to achieve finer detail in a subdivided, trimmed mesh representation, the new vertices must lie on the boundary of the surface so that detail vectors may be derived for each vertex. Application, p.4, lines 3-17; p.7, lines 16-17. Generally, detail vectors allow an object surface to be depicted more accurately. Application, p.7, line 24 to p.8 line 26; Figs. 12A-13C. In particular, through the present invention's use of detail vectors, a mesh representation in the vicinity of the trim curve can be depicted with greater precision using triangles with improved aspect ratios. Application, p.4, lines 3-11; p.22, line 27 to p.23, line 8. In view of this important distinction between the method of Einkauf and the method of the present invention, Applicant requests that the Examiner withdraw the rejection of claim 10. Applicant further requests that the rejection of claim 11 also be withdrawn, since claim 11 depends from claim 10.

As for claims 24 and 26, Applicant has amended claim 24 herein by adding the requirement of locating boundary vertices on the trim curve projection for polygons located near the trim curve. This amendment is fully supported by the Specification as filed, for example, at p.4, lines 3-17 and at p.24, lines 6-11. For the same reasons set forth above, Applicant believes this requirement distinguishes amended claim 24 from any trimming method disclosed in Einkauf. Therefore, Applicant requests that claim 24 be allowed in its amended form. Applicant further requests that claim 26, which depends from claim 24, also be allowed in view of the amendment.

On page 3 of the Office Action, the Examiner asserts a nonstatutory double patenting rejection of claim 1-26 over claims 1-35 of U.S. Patent No. 6,603,473, which patent is owned in common by the assignee of the present Application. Accordingly, Applicant files with this response a Terminal Disclaimer to obviate the double patenting rejection.

In view of all of the above, Applicant believes that this Application is now in condition for allowance. The Examiner is therefore requested to allow all claims and pass this application to issuance.

In papers filed concurrently with this response, Applicant has authorized the U.S. Patent and Trademark Office to charge the fee set forth under 37 C.F.R. § 1.20(d) for filing the Terminal Disclaimer. Applicant believes that no other fees are due for filing this Response. However, if any fees are in fact due, the Commissioner is hereby authorized to charge the same to Howrey Deposit Account No. **08-3038**, referencing Howrey Dkt. No. **01339.0005.00US01**.

Respectfully submitted,

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